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Total Number of Pages in This Submission 5

Application Number	10/531,845
Filing Date	11/21/2005
First Named Inventor	Kees C J M N Brekelmans
Art Unit	2856
Examiner Name	Ryan S. Christensen
Attorney Docket Number	35015/045US

ENCLOSURES (check all that apply)

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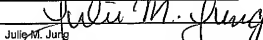
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Date	June 21, 2007	Reg. No.	47,833

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/531,845	11/21/2005	2856	1930	021958-031WO	2	38	2

LOCKE LIDDELL & SAPP LLP

CONFIRMATION NO. 3915

Docket Coordinator
 Locke Liddell & Sapp
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Applicant(s)

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 Jan Willem J W Van Rijswijk, Veenendaal, NETHERLANDS;

021958-031US

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Power of Attorney:

David Nelson-40370

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/EP03/11565 10/17/2003

Foreign Applications

EUROPEAN PATENT OFFICE (EPO) 02023415.9 10/18/2002

Projected Publication Date: 06/01/2006

Non-Publication Request: No

Early Publication Request: No

Title

characteristic

Method and device for determining a characteristic value that is representative of the condition of a gas

Preliminary Class

073

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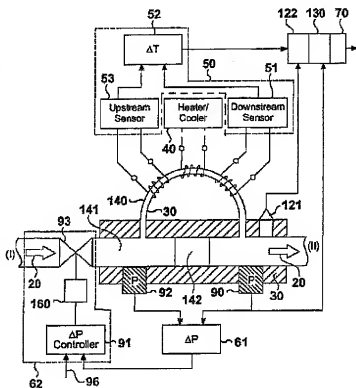
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[Continued on next page]

(54) Title: METHOD AND DEVICE FOR DETERMINING A CHARACTERISTIC VALUE THAT IS REPRESENTATIVE OF THE CONDITION OF A GAS



(57) Abstract: The invention relates to a device and methods for the characterisation of a flowing substance, liquid or gas. Particular embodiments of the invention relate to the use of the device for the identification of a flowing substance, for controlling the flow of a fuel or combustion gas to deliver a controlled heat of combustion and for measuring the heat capacity of a gas. Further embodiments of the invention relate to a flow control device for controlling the flow rate of a flowing substance and a method for the combustion of a fuel or combustion gas. The device for the characterisation of a flowing substance comprises: a transport duct on which is mounted a heating or a cooling element; a temperature difference sensor comprising a first temperature measurement cell downstream of the heating or cooling element and means to determine a temperature difference in the flowing substance upstream and downstream of the heating or cooling element; flow control means comprising flow measurement means for measuring a mass flow characteristic and flow correction means for correcting for measured mass flow variations; and evaluation means for evaluating a characterising feature of the flowing substance comprising a function relating temperature differences measured on one or more calibration substances to one or more

characterising features of the flowing substance. The device is relatively simple and cheap and gives a quick but accurate and reliable characterisation of a flowing substance, gas or liquid, that can be used in a flow control device to control the flow rate of unknown substances.